

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - NSPS SOURCE - RENEWAL

PERMITTEE

Akzo Nobel Coatings, Inc.
Attn: Tom Larson, Engineering Manager
21625 Oak Street
Matteson, Illinois 60443

Application No.: 75120082

I.D. No.: 031180AAF

Applicant's Designation:

Date Received: April 21, 2003

Subject: Ink, Varnish and Alkyd Production

Date Issued:

Expiration Date:

Location: 21625 Oak Street, Matteson

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of 8 reactors with condensers, 2 reactors with Venturi scrubber, 9 drum filling stations, 1 tanker truck filling station, 9 holding/mixing tanks (all of the fore mentioned items are controlled by a thermal oxidizer in addition to any other control units), one thermal oxidizer, 3 scale tanks, 4 raw material slurry tanks, 9 raw material storage tanks, a bulk material storage and conveying system, and natural gas fuel combustion sources pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., volatile organic material (VOM) to less than 25 tons per year, combined hazardous air pollutants (HAPs) to less than 25 tons/yr, and single HAPs to less than 10 tons/yr). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
2. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.

3. The two 12,000 gallon liquid resin storage tanks and storage Tanks 105 through 109 are subject to the New Source Performance Standard (NSPS) for Volatile Organic Liquid Storage Vessels for which construction commenced after July 23, 1984, 40 CFR 60, Subparts A and Kb. The Illinois EPA is administering the NSPS in Illinois under a delegation agreement.
4. Emissions and operation of equipment shall not exceed the following limits:

<u>Material</u>	<u>Production/Usage</u>		<u>NO_x Emissions</u>		<u>VOM Emissions</u>	
	<u>Monthly</u>	<u>Yearly</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
Ink Vehicle ¹						
Production	2,450 tons	24,500 tons	---	----	2.25	22.5
Natural Gas Usage	25 mmscf	250 mmscf	1.3	12.5	0.07	0.7

These limits are based on material production/usage and AP-42 emission factor of 120 lb/ton of product from Section 6.7 for ink manufacturing and an thermal oxidizer overall control efficiency of 98.47% from the most recent performance test. Compliance with annual limits shall be determined from a running total of 12 months of data.

¹ Ink vehicle production includes solvents.

- 5a. The thermal oxidizer shall be in operation at all times when the associated emission unit(s) is in operation and emitting air contaminants.
- b. The thermal oxidizer combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation.
- c. The thermal oxidizer shall be equipped with a continuous monitoring device which is installed, calibrated, maintained, and operated according to vendor's specifications at all times that the thermal oxidizer is in use. This device shall monitor the thermal oxidizer combustion chamber temperature.
6. This permit is issued based on:
 - a. The source not producing ink.
 - b. The thermal oxidizer overall control efficiency being greater than 81%, pursuant to 35 Ill. Adm. Code Subpart QQ Miscellaneous Formulation Manufacturing, Section 218.946a; and
 - c. All tanks with capacities greater than 250 gallons storing organic material with vapor pressure less than 2.5 psia are not subject to the submerged loading pie requirements, pursuant to 35 Ill. Adm. Code 218.122c.

7. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in this permit.
 - a. Facility wide natural gas usage (million ft³/month and million ft³/year).
 - b. Ink vehicle production (tons/month and tons/year).
 - c. Type and amount of HAP usage (tons/month and tons/year).
 - d. VOM and HAP emissions (tons/month and tons/year).
 - e. Thermal oxidizer operation and maintenance, including operating temperature.
 - d. The Permittee shall collect and record the following information each day;
 - i. Thermal oxidizer combustion chamber monitoring data.
 - ii. A log of operating time for the capture system, thermal oxidizer, monitoring device, and the associated emission unit(s).
 - iii. A maintenance log for the capture system, thermal oxidizer, and monitoring device detailing all routine and non-routine maintenance performed including dates and duration of any outages.

The Permittee shall keep dimensional records and analysis of capacities for the two 12,000 gallon liquid resin storage tanks and storage Tanks 105 through 109, pursuant to New Source Performance Standards (NSPS), Subpart Kb, 40 CFR 60.116b and 35 Ill. Adm. Code 218.129f.

8. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source Office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
9. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

10. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional Office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this, please call Randy Solomon at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RBS:psj

cc: Illinois EPA, FOS Region 1
USEPA

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from ink, varnish and alkyd production operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 25 tons per year of VOM, 25 tons/yr of combined HAPs, and 10 tons/yr of each single HAP at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

Emission Unit	Emissions (Tons/Year)		
	NO _x	VOM	HAP
Ink Vehicle Production	----	22.5	< 10
Natural Gas Usage	<u>12.5</u>	<u>0.7</u>	<u>----</u>
Totals:	12.5	23.2	< 10

RBS:psj